



Dell's Lean Experience



Definition



Lean is involving everybody in the
creation of Value for our Customers
through the elimination of Waste



Lean Milestones @ Dell

- 1999 “Lean Thinging” introduced by a Senior VP
 - Reading clubs established
 - Dedicated teams setup to address specific problems
- 2001 Lean Training with Dan Jones at Cardiff University
 - Started to use Lean in the Sales Offices
 - First Value Stream Map completed
- 2002 Engaged Unipart as a consultant
 - Benchmarked other companies
 - Kaizen Events selected as EMF Lean introduction vehicle
 - Four Kaizen Events conducted, limited to one product line
 - Dell America built model Lean/TPS lines.
- 2003 Lean extended across all product lines
 - YOMO consulting engaged as consulting partners
 - 13 Kaizen Events conducted this year



Why Kaizen Events



Kaizen Event = Kaizen Blitz = Kaikaku

- Successful infra-structure and process
- Successfully delivering 40% year on year productivity improvement
- Space constrained
- Not everyone was bought in
- Least impact to current operations



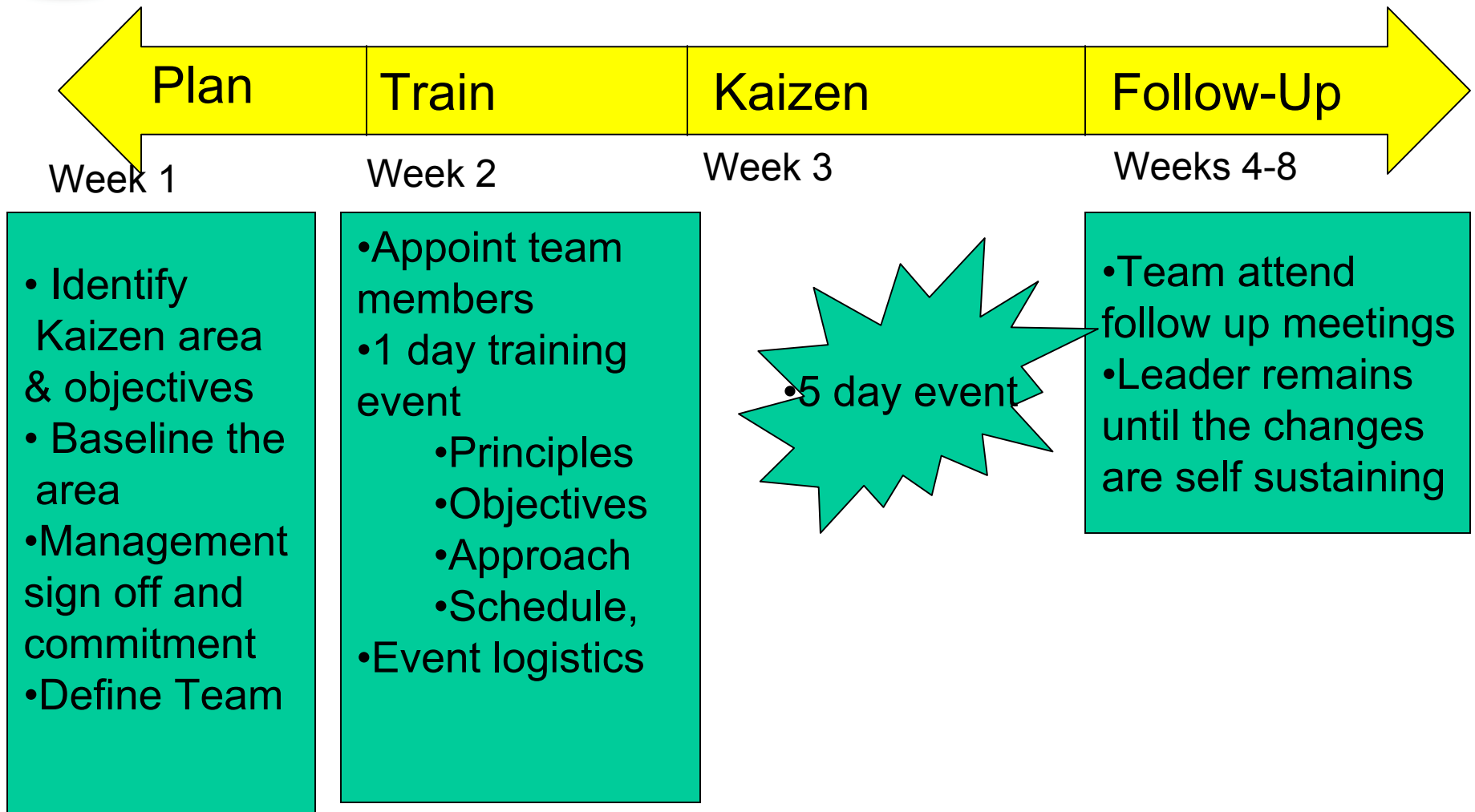
Change for the Better

Kaizen Approach: Deliberately constructing an environment conducive to having capable and empowered people creating and rapidly implementing ideas to resolve critical business issues in a sustainable way

- Think about making it better for more
- Burst of activity
- Bias for action
- Focused
- Substantial change
- Manage to Completion(**Sustain**)

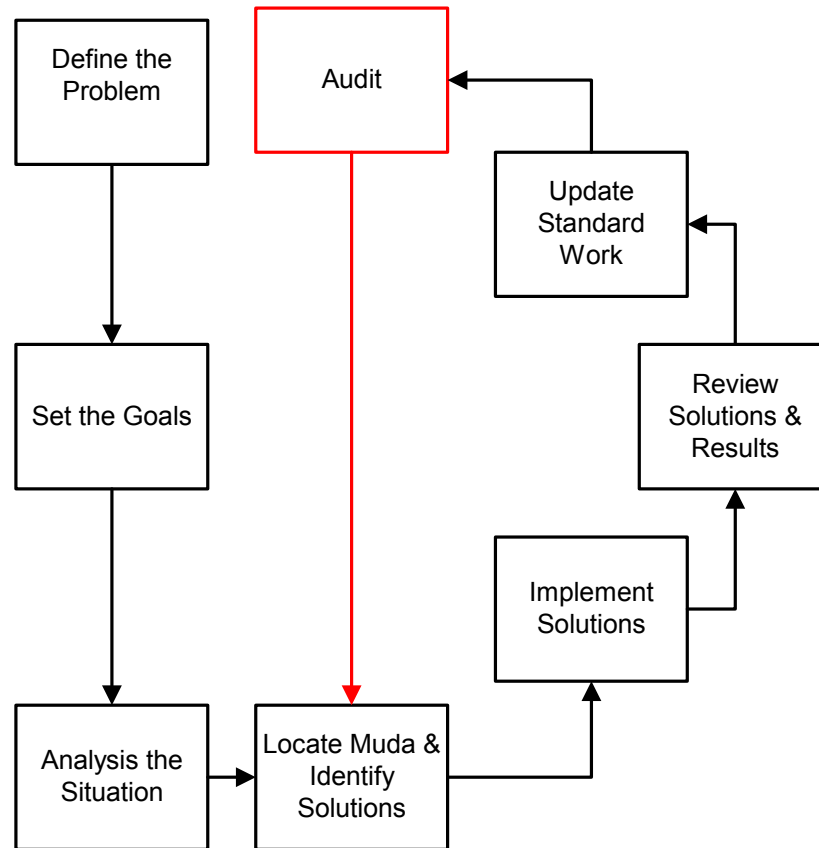


Kaizen Process





Kaizen Model





Results

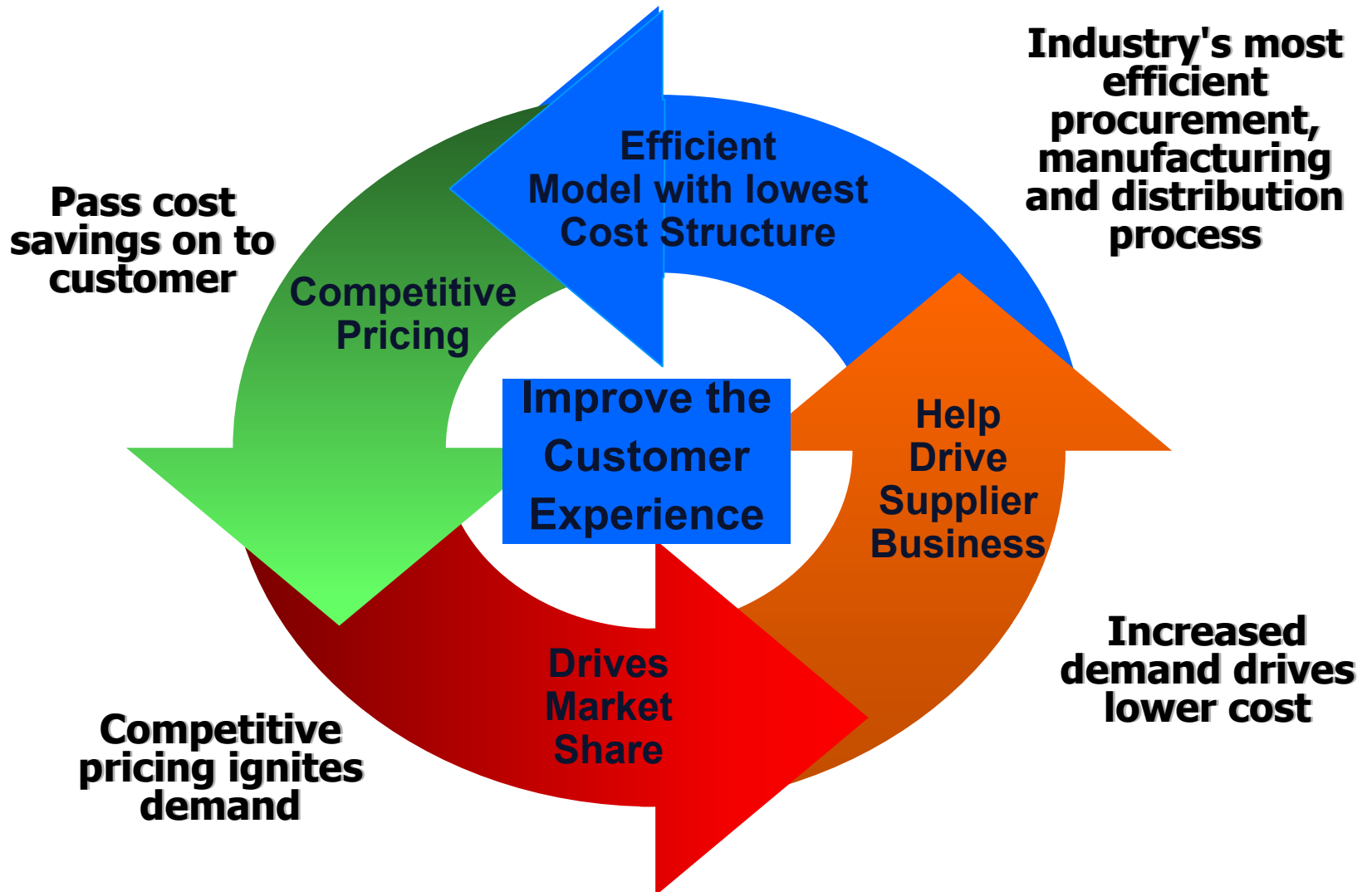


FY04 Kaizen Events	External Assistance	Results
Desktops Line 3 Backend		35% increased capacity, 50% reduction in fallout
Desktops Line 3 Extended Test		20% productivity improvement 40% improvement in cycle time
Desktops Line 3B Build	YOMO	13% productivity Improvement
Desktop Kitting		30% Increase in capacity
Repair Cycle time		60% reduction in the repair time
Enterprise Pass Thro Area		25% productivity improvement and avoided \$30k capital investment
Enterprise Staging/Options	YOMO	25% productivity improvent
Enterprise EMR		10% productivity improvement
Enterprise Kitting		66% improvement in quality, 33% Build productivity improvement
Notebooks Line 7 Build		15% productivity improvement
Notebooks Line 6 Kitting	YOMO	50% increase in output
Notebook Line 6 Build		20% productivity improvement
Receiving Line 6		41% reduction cycle time

A better deal for our Customers



Improving The Value Proposition

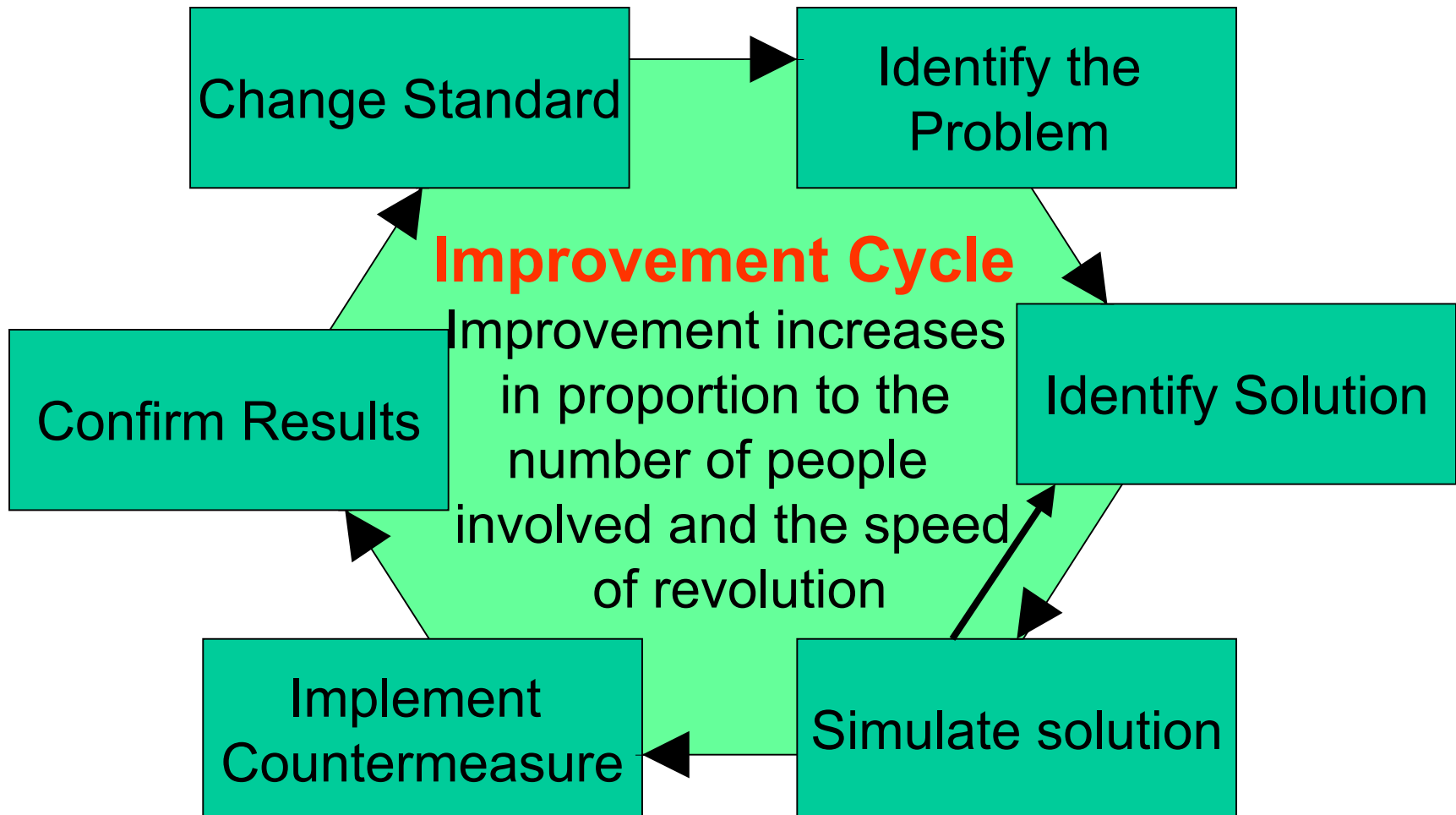




Kaizen Capability



Embracing change quickly is better than waiting for Perfection!
- get the wheel of change rotating as soon as possible





Backups



Value Proposition



Company

Customer

Margin = Selling Price - **Cost**

Buying Price < Value = Demand

Product / Service

Profit = Margin x Demand